

REMARKS

The Office Action of March 30, 2006 has been carefully considered. In response thereto, the claims have been amended as set forth above. Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1, 2, 3, 5, 6 and 7 were rejected as being unpatentable over Walters in view of Patel. Claims 4 and 8 were rejected as being unpatentable over the same combination further in view of Hoskins. Claims 3 and 7 have been canceled. Reconsideration is respectfully requested.

Although Walters and Patel arguably each teach certain elements of the present invention, there is no teaching or suggestion in the references themselves that would suggest combination in a manner to arrive at the present invention.

Claim 5 has likewise been amended to recite the use of a hardware pre-processor.

The present invention relates to a Java accelerator that combines the features of hardware translation and loop caching. When a Java loop is first encountered, it is translated in hardware, and corresponding native instructions are stored. Such hardware translation is 10 to 100 times faster than software translation. When the loop has been translated, it is executed the required number of times, then exited, whereupon normal native execution resumes. When the loop is encountered again, it may be executed immediately, having been previously stored as a sequence of native instructions

Waters relates to a cross-compiler in which loops are translated in software. Patel performs hardware translation but does not describe any special treatment of loops.

It would not have been obvious to modify Walters in view of Patel to perform hardware translation. In particular, Walters has specific objects that can only be practically achieved in software. As described in columns 2 and 3 of Walters, Walters aims to cross-compile large chunks of non-native code, to reduce the amount of code required for handling condition codes, and allow for partial (rather than total) flush of cross-compiled code. Achieving these objectives can only practically be achieved using a software approach as described by Walters.

Withdrawal of the rejection and allowance of claims 1, 2, 4-6 and 8 is respectfully requested.

Respectfully submitted,



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